Table 1. Sediment trap deployment locations and characteristics.

							Benthic sediment composition		
Side	**Location**	**Latitude**	**Longitude**	**Substrate**	**Reef**	**Depth (m)**	**%Organic**	**%Carbonate**	**%Terrigenous**
North	1A	-14.29001	-170.68153	Sand/mud	backreef	1	4	81	15
North	1B	-14.28937	-170.67921	Coral	reef flat	1	5	82	13
North	1C	-14.28838	-170.67804	Coral	forereef slope	10	5	82	13
North	2A	-14.29179	-170.68196	Sand/mud	backreef	1	4	31	65
South	2B	-14.29149	-170.67992	Coral	backreef pools	2	-	-	-
North	2C	-14.28989	-170.67663	Coral	forereef slope	15	5	82	13
South	3A	-14.29269	-170.67896	Coral	reef flat	1	4	88	8
South	3B	-14.29364	-170.67710	Coral	reef flat	2	4	88	8
South	3C	-14.29268	-170.67545	Coral	forereef slope	10	-	-	-

C:\Users\Alex\Documents\GitHub\Fagaalu-Sedimentation\Data\Deployment table\SedPod_Deployment.xlsx

Table 2. Spearman correlation coefficients for Sedimentation vs. SSY, and Sedimentation vs. Waves.

	Total	Terrigenous	Terrigenous+Organic	Carbonate
P1A				w: 0.721
P1B	w: -0.617	w: -0.633	w: -0.633	
P1C				
P2A			w: -0.527	
P2B				
P2C				
P3A				
P3B	w: -0.806			
P3C				
North_Pods			ssy:-0.573	
South_Pods				
T1A	w: 0.600			w: 0.717
T1B	w: 0.750			w: 0.833
T1C	w: 0.973	w: 0.682	w: 0.755	w: 0.945
T2A	ssy:0.555			ssy:0.545
T2B				ssy:0.629
T2C	w: 0.936			w: 0.952
T3A	w: 0.900	w: 0.545	w: 0.564	w: 0.873
T3B	w: 0.891			w: 0.955
T3C		ssy:-0.627	ssy:-0.573	
North_Tubes	w: 0.700			w: 0.818
South_Tubes	w: 0.864		w: 0.545	w: 0.927

Table 3. Significant P-values for multiple regression of Sedimentation ~ SSY + Waves.

	Total	Terrigenous	Terrigenous+Organic	Carbonate
P1A				
P1B				
P1C				
P2A				
P2B				
P2C				
P3A				
P3B				
P3C				
North_Pods				
South_Pods				
T1A				
T1B	w^{*}			w^{**} ssy^{+}
T1C	w^{*}	w^{+}	w^{*}	w^{*}
T2A	ssy^{***}	ssy^{***}	ssy^{***}	ssy^{+}
T2B				ssy^{+}
T2C	w^{*}		w^{+}	w^{*}
T3A				
T3B				
T3C	w^{+} ssy^{+}			w^{*} ssy^{+}
North_Tubes				w^{+}
South_Tubes				

Table 4. Comparison of sedimentation rates between Tubes and SedPod deployments in similar fringing reefs embayments

Reference	Study Site	Number of traps	Sample Interval	Deployment Time (d)	Tube Trap (g $m^{-2}d^{-1}$)	SedPod (g $m^{-2}d^{-1}$)
This study	Faga'alu, American Samoa	9	24-53 d (mean=36)	1 year	1-623 (Mean totals varied from 13-269)	0-40 (Mean totals varied from 0.0-12.4)
Bothner et al., (2006)	South Molokai, Hawaii	8	~90 (STT[a])	2 year	5-4,000 (non-storm) >7,400 (storm)	-
		2	4.5 d (RST[b])	2 year	1.5-1,800	
Storlazzi et al., (2009)	Hanalei Bay, Kauai, Hawaii	4	~90 (STT)	90 d	177-636 Mean:365±213	-
		2	4.5 d (RST)	90 d	5- 510 Mean:87±123; 47±43	
Field et al., (2012)	Hanalei Bay, Kauai, Hawaii	1	36; 60 d (STT)	96 d	67-172	3.5-6
		1	4.5 d (RST)	96 d	Not reported	
Gray et al., (2012)	St. John, USVI	11	26 d	3-5 year	1 to >5,000 (Means ranged from 0-400) **terrigenous fraction only	-

a. STT = Simple Tube Trap
b. RST = Rotating Tube Trap